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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,519	09/29/2003	Takafumi Kurosawa	SHD-103-USAP	9109

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EXAMINER	
MERCIER, MELISSA S	
ART UNIT	PAPER NUMBER
1615	
MAIL DATE	DELIVERY MODE
03/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/671,519	KUROSAWA ET AL.	
	Examiner	Art Unit	
	MELISSA S. MERCIER	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

In view of the Appeal Brief filed on October 4, 2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Lentini et al. (WO 00/33803) and Katsuhiro (JP01165517) in view of Tanaka (US Patent 5,540,921).

Lentini et al. teach of the preparation of sunscreen compositions that feel better on the skin and are less irritating than typical sunscreens because the enhanced photo protection is not achieved by using greater quantities of the sunscreen agent, (see page 1, and lines 5-10). "More preferably, the organic sunscreen is octyl methoxycinnamate" and other "sunscreens such as zinc oxide and titanium dioxide" (as specifically recited by Lentini et al. on page 5, lines 22- 23 and lines 10-11, respectively). It is well known in the art that titanium dioxide is the oxide of titanium metal which requires the stoichiometric presence of 2 moles of oxygen to balance the cationic charge (+4) of titanium, and so the skilled artisan would easily recognize the titanium dioxide is the oxide of titanium metal. In addition, Lentini et al. also disclose of the presence of a variety of sunscreen agents, (see pages 5 and 6).

Lentini further discloses the use of a fluororesin polymer of a submicron particle size and a sunscreen in a hydrophobic vehicle. sunscreen agent", (see page 3, lines 10-12). Lentini et al. teach to the skilled artisan, the fluororesins can be any fluorinated polymer, (page 4, line 3) and the fluororesin is incorporated into an oil component, (page 4, line 12).Additionally, the fluororesin can be pre-dispersed in a hydrocarbon oil (page 4, line 28). These teachings specifically provide and guide the skilled artisan to use "any fluorinated polymer" along with a known sunscreen agent in order to increase the SPF of the sunscreen composition. Moreover, Lentini et al. even state that the fluorinated polymer is incorporated or treated with "an oil", "a hydrocarbon oil", or even "a vehicle that is hydrophobic", which provides the skilled artisan not only with explicit teaching of combining or treating any fluorinated polymer with a hydrophobic manner, or

hydrophobic medium as specifically disclosed by Lentini et al. Accordingly, the prior art reference of Lentini et al. provides the skilled artisan with teachings and motivations to use a fluorinated polymer along with the sunscreen agent as well as providing explicit and clear support and suggestions to have this fluorinated polymer occur in a hydrophobic vehicle or environment.

Lentini does not disclose the use of a glucoside selected from the group consisting of polyoxyethylene methyl glucoside, polyoxypropylene methyl glucoside and a mixture thereof.

Lentini additionally does not disclose the oxide being treated in a hydrophobic manner selected from the group consisting of methyl hydrogen polysiloxane and silane coupling agents, metal soap processing, fluorine processing with perfluoroalkylphosphate diethanolamine salt and perfluoroalkylsilane and processing with dextrin fatty acid esters.

Katsuhiro et al. teaches cosmetic agents that are also used to sustain the effects or prevent the damaging effects of ultraviolet rays of the skin with titanium dioxide along with polyoxyethylene methylglycoside, (see translated Patent Abstract of JP 01165517). In addition, it is well within the knowledge of the skilled artisan to utilize homologues of a compound, such as polyoxyethylene methylglycoside, which would obviously embrace the homologue of polyoxypropylene methylglycoside.

Tanaka discloses a solid O/W-type cosmetic composition comprising a powder component, including titanium dioxide and zinc oxide (column 3, lines 26-35). Powders provided with water repellency by a hydrophobic treatment can also be used. Fluorine

compounds, silicone oils, metallic soaps, waxes, oils and fats, hydrocarbons and the like can be given as materials for the hydrophobic treatment (column 3, lines 36-40). Examples 2-3 and Comparative Examples 2-4 use titanium dioxide treated with a fluorine compound disclosed as AG530, which is diethanolamine fluoroalkylphosphate (column 7, lines 49-54). Example 7 discloses silicone treated micronized titanium dioxide (column 11, lines 23-38). The O/W-type cosmetic composition can be used as solid cosmetic products such as sun screening creams (column 5, lines 25-28).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have used to hydrophobic treatment of the oxides disclosed by Tanaka with in the composition of Lentini is order to provide water repellency.

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose ....[T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Since both of these prior art references are directed to the very same use, namely topical sunscreen preparations for the skin, one having ordinary skill in the art would have been motivated to combine sunscreen components that are already known in the prior art to be used to treat the very same condition, namely sunburn.

Conclusion

All claims are rejected. Due to the new grounds of rejection presented in this office action, this action is made Non-Final. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA S. MERCIER whose telephone number is (571)272-9039. The examiner can normally be reached on 7:30am-4pm Mon through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melissa S Mercier/
Examiner, Art Unit 1615

/Michael P Woodward/
Supervisory Patent Examiner, Art Unit 1615